

FEATURES

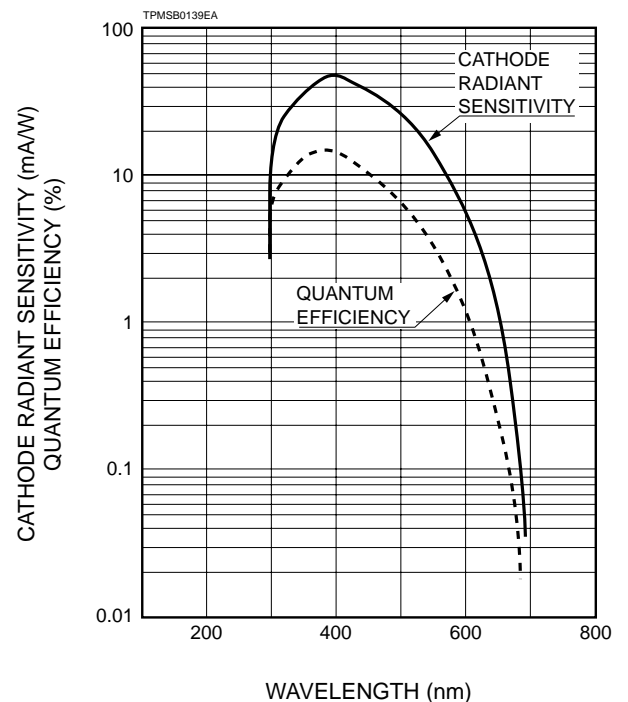
- 28mm (1-1/8 Inch) Diameter Side-on
- 300 to 650nm Spectral Response
- Low Dark Current Visible Range Photocathode



GENERAL

Parameter	Description/Value	Unit
Spectral Response	300 to 650	nm
Wavelength of Maximum Response	400	nm
Photo-cathode	Material	Sb-Cs
	Minimum Useful Size	8 × 24
Window Material	Borosilicate glass	—
Dynode	Structure	Circular-cage
	Number of Stages	9
Direct Interelectrode Capacitances	Anode to Last Dynode	4
	Anode to All Other Electrodes	6
Base	JEDEC No. B11-88	—
Suitable Socket	E678-11A	—

Figure 1: Typical Spectral Response



PHOTOMULTIPLIER TUBE 1P21

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1250	Vdc
	Between Anode and Last Dynode	250	Vdc
Average Anode Current		0.1	mA
Ambient Temperature		-80 to +50	°C

CHARACTERISTICS (at 25°C)

Parameter		Min.	Typ.	Max.	Unit
Anode Sensitivity	Luminous (2856K)	50	250	—	A/lm
	Radiant at 400nm	—	3.0×10^5	—	A/W
Cathode Sensitivity	Luminous (2856K)	25	40	—	$\mu\text{A/lm}$
	Radiant at 400nm	—	48	—	mA/W
	Quantum Efficiency	—	13 at 350nm	—	%
Gain		—	6.25×10^6	—	—
Anode Dark Current (after 30 minute)		—	1	5	nA
Time Response	Anode Pulse Rise Time	—	2.2	—	ns
	Electron Transit Time	—	22	—	ns

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	P
Ratio	1	1	1	1	1	1	1	1	1	1	1

Supply Voltage: 1000Vdc, K: Cathode, Dy: Dynode, P: Anode

Figure 2: Typical Gain Characteristics

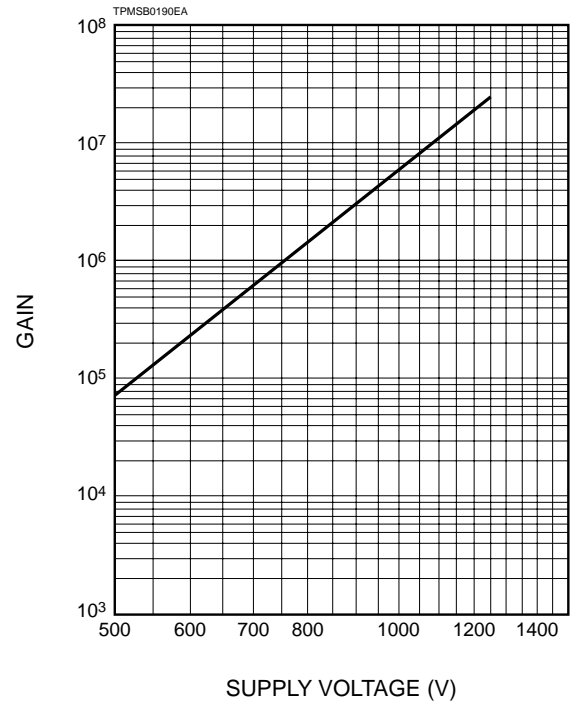
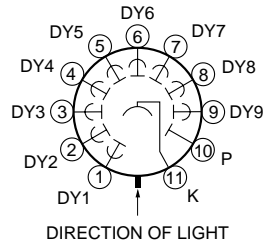
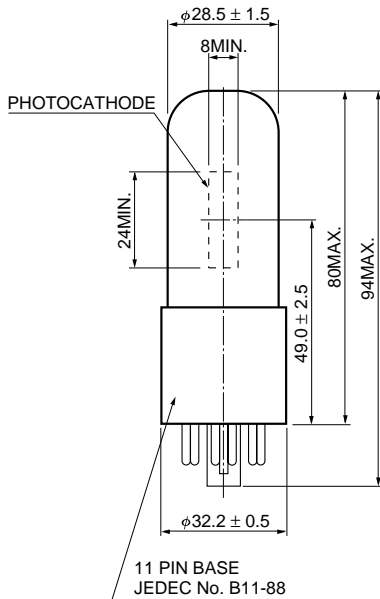
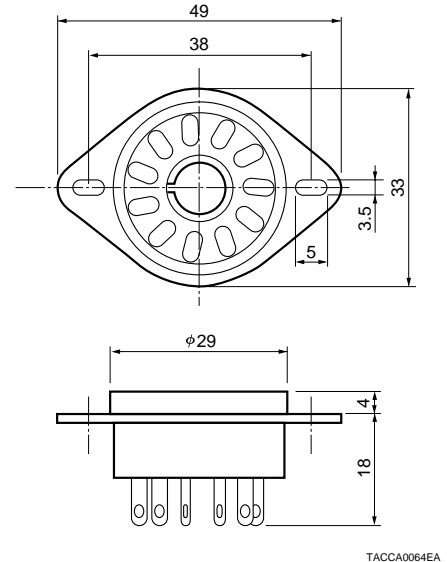


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



Socket (Option) (E678-11A)



HAMAMATSU

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